

Great Basin Coordination Center

Fuels and Fire Behavior Advisory

Updated September 1, 2016

Subject: Potential for extreme fire behavior is present in Western/Northern Nevada, Southeast Oregon, Southern and Central Idaho and Northwest Utah north of I-70 due to low fuel moistures, heavy fine fuel (grass) loading, and prolonged dry weather. Areas with sagebrush and a heavy grass fuel load are at the greatest risk with sustained winds greater than 20 mph.

Discussion: Very high to extreme fire behavior has been reported from June through August and is expected to continue into early September.

Near to above normal winter precipitation, along with a wet spring resulted in above normal fine fuel loading. Some areas are reporting grass loading 2 to 3 times above normal conditions. Hot and dry conditions continued through August, with some areas experiencing dry conditions for 4 to 8 weeks or longer, causing **live fuels to rapidly dry to record or near record levels**. The U.S. Drought Monitor shows much of the area to be abnormally dry or in moderate drought. **The Energy Release Components (ERC) are above the 90th-97th percentile and above levels during the big fire years of 2006 and 2012, with many areas exceeding historical maximums.**

September will start out dry and breezy in western areas with breezy winds and lightning further east/north. **There may be chances for some wetting rainfall, cooler temperatures and higher humidity across parts of Idaho/Oregon during the first week in September, however any moderating weather will only temporarily modify fuel conditions, with conditions quickly returning to extreme levels.** Ignition potential is expected to be higher than normal with any lightning due to very critical fuels.

Concerns to Firefighters and the Public:

- Fires can exhibit: extreme rates of spread, elongated flaming fronts, increased fire brands resulting in long range spotting. These factors contribute to the **high resistance to control of fires that have occurred over the last 2 weeks**, and promote flare-ups on direct lines.
- Flashy fine fuels, sagebrush and pinyon-juniper will ignite easily and exhibit **extreme rates of spread**.
- Anticipate dust devils and fire whirls to develop in hot, dry and unstable conditions; especially in fine flashy fuels. Fire whirls will rapidly increase fire behavior to extreme conditions, which can easily jeopardize control lines and quickly increase fire growth rates.
- Large areas can be consumed in all fuel types in short time periods, even in low slope and wind conditions.
- Fire intensity will be greater and burn periods will be longer with active fire behavior continuing during the overnight hours; especially at mid to higher elevations.
- Short periods of precipitation and higher relative humidity will moderate fire behavior for only short time periods. Hot and dry weather will quickly dry fine fuels and return fire behavior conditions to extreme.
- **Don't be fooled by low fine fuel heights. Fine fuel loading is dense and continuous and will support extreme rates of spread.**

Mitigation Measures:

- Review and become familiar with evacuation plans in communities that may be affected.
- Use larger safety zones than recommended and plan escape to them sooner.
- Ensure firefighters have good anchor points - keeping one foot in the black.
- Lookouts-Communications-Escape Routes-Safety Zones (LCES)
- Indirect tactics may be the most effective, but increased emphasis needs to be placed on LCES.
- Establish trigger points and constantly re-evaluate tactics/weather/fire behavior to ensure safety.
- Consult the latest weather and fire danger information at <http://gacc.nifc.gov/gbcc/>.

Area of Concern: Areas of concern include Western/Northern Nevada, Southeast Oregon below 5,500, Southern and Central Idaho, and Northwest Utah north of I-70 especially in the heavy fine fuel (grass) loading and sagebrush.